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XXIII.—On the Pentastomum polyzonum of Harley; with a Note on the Synonymy of the allied Species. By F. Jeffrey Bell, M.A.

The interest and importance which attach to an exact knowledge of the history and distribution of all entozoic parasites induce me to give as careful a description as is possible of two specimens of a species of *Pentastomum* which were lately forwarded to the British Museum by Mr. W. E. Dawes. They had been taken from a "boa constrictor" which had been in Wombwell's menagerie. Unfortunately the skin was not examined while in a condition in which the species could be definitely distinguished; but Dr. Günther is satisfied that the specimens were taken from an African python; they are said to have been found in the "flesh of the body" as well as "within the intestines."

As in so many other branches of zoology, the question of synonymy still hampers the progress of investigation; and it will be necessary to direct attention to the names of several of these Arachnoid forms which are known to be parasitic in the Ophidia.

The most common entozoon of this genus would appear to be the *P. proboscideum* of Rudolphi, to which I should be inclined to give rather the name of *P. crotali*; for the synonymy of Diesing*, and of Rudolphi himself†, seem to me to

^{*} Monog. Pentastoma, p. 21. † Entoz. Synopsis, p. 434. Ann. & Mag. N. Hist. Ser. 5. Vol. vi. 13

be conclusive as to the point that the credit of first describing and naming this species belongs to Alexander von Humboldt*. At any rate I am quite certain that there is no justification at all to be found for the name adopted by M. Mégnin in his just published and valuable handbook on parasites †; for the name of moniliforme was not given by Diesing till the year 1836, and was then given to what is either a very well-marked variety of P. proboscideum, Rud., or, as is more probable, and as Leuckart ‡ imagines, a species distinct from that more common form.

The peculiarly unsatisfactory representation of the creature given by M. Mégnin, is not obscure as to one point only, the moniliform character of the example figured (t. c. fig. 62, A); so far, however, as a judgment on this point can be given from the specimens of this species which already exist in the national collection, and which were named by no less eminent a zoologist than the late accomplished Dr. Baird, it seems pretty certain that this moniliform appearance is an unusual and not a typical occurrence among examples of this Ophidian entozoon.

P. teretiusculum, Baird §, is one of the few species described since the publication of Leuckart's essay; but it is quite dis-

tinct from the creature now under investigation.

P. annulatum, from the Egyptian cobra (Naja haje), was described and figured by Dr. Baird in $1853 \parallel$; but it is not mentioned in the synopsis of species which concludes Leuckart's essay (1860) ¶. Unfortunately it does not form a portion of the national collection; and it is impossible to say whether, with the twenty-eight rings with which Dr. Baird credits it, the length should be stated at $2\frac{1}{4}$ inches or at 3***.

In the year 1857 Dr. George Harley read before the Zoological Society a paper entitled "On the Anatomy of a new Species of *Pentastoma* found in the Lung and Air-sac of an Egyptian Cobra." This cobra was the "Naja haje;" and

* See Humboldt and Bonpland, Voyage, ii. 1, p. 301. † Les Parasites et les maladies parasitaires (Paris, 1880).

‡ Bau u. Entw. der Pentastomen, p. 154.

§ P. Z. S. 1862, p. 114. ¶ P. Z. S. 1853, p. 22.

¶ I fancy Dr. Baird's work must have been unknown to Prof. Leuckart; for I find no reference to *P. megacephalum*, described in the same paper and figured in the Museum catalogue of Entozoa by Dr. Baird

(1000).

** The latter statement as to its length was made by Dr. Edwards Crisp in what appears to have been a verbal communication to the Zoological Society (P. Z. S. 1853, p. 68); the type seems to have been in the possession of the Society, and to have passed, on the dispersal of their museum, into the hands of the naturalist just named.

the paper justifies its title by dealing only with the anatomy of the new species, of which the author gives no technical zoological description. He does, however, give a figure of it; and as that figure was drawn by Mr. Ford, there is no need to say that it is excellent. The parasite is represented as of the natural size, i. e. 94 millims. long, and at the rings about 5 millims. wide; there are, as I count them, 27 of these rings.

When we compare this figure with the description and figure given by Dr. Baird (t. c. p. 22), we shall, I think, be led to conclude, with Dr. Harley*, that the species are identical; and we shall therefore have to regard the term multicinctum of the latter author as synonymous with the earlier

term annulatum.

Dr. Harley concludes his paper with a reference to another form, of which he provides us with an admirable figure. His only account of it is a slight comparison of its characters: it is "shorter and thicker, has only nineteen strong projecting rings instead of twenty-seven, and its tail is conical and not cleft." It was found in the collection of Dr. Sharpey, but had no history connected with it. For this species Dr. Harley proposed the name of polyzonum.

As Leuckart's definition was drawn up from Harley's paper without the inspection of any specimens, I add the following description, drawn up from the two specimens for-

warded by Mr. Dawes:—

The specimens are two in number, both female, and respectively 73 and 55 millims. long; they are of a cream-white colour; and the integument is, at regular intervals, produced into an encircling ridge, so that the animal is divided externally into a number of rings; the general character of these cannot perhaps be better defined than in the words of Diesing, "cute externâ in formâ præputii;" and this is especially true of the terminal division. The head is square, and measures, in the larger specimen, 5 millims. either way. On its inferior surface and quite at the anterior edge there are four elongated slits, taking a slight direction outwards; and each of these is provided with a single largish hook, sharply recurved at its extremity. The small circular dot-like mouth is about 1.5 millim. from the anterior edge of the head.

Of the succeeding rings there are nineteen in both specimens; the general width of the body at the rings is 7.5 millims.; and the intervening parts are about 5 millims. wide. It is

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^{* &}quot;I think it probable, however, that the animal which he [Dr. Baird] described is one of the same species as I have obtained specimens of."

only quite at the end of the body that any tapering becomes apparent, and the last ring does not extend onto the ventral side.

When this description is compared with the figure supplied by Dr. Harley it is impossible to detect any difference; that learned naturalist does not state definitely whether the creature is figured of its natural size (it there measures 68 millims.); but we may trust Mr. Ford to have represented its general proportions, and to have given exactly the number of its rings; these are nineteen in number, or exactly the same as in the specimens sent by Mr. Dawes. The figures, then, given by Dr. Harley being so completely recognizable, I have great pleasure in applying to these creatures the name given in his plate, and thereby to credit the British Museum with two specimens of the species *P. polyzonum*, Harley.

In conclusion, the discussion of the characters of these two species seems to me to give a value to the number of the rings which a less critical examination would hardly have

induced us to suspect.

XXIV.—New Neotropical Curculionidæ.—Part III. By Francis P. Pascoe, F.L.S. &c.

AMBATINÆ.

Ambates elegans.
—— cretifer.

PRIONOMERINÆ.

Themeropis divergens.

Camptochirus ornatus.

abstersus.

— angustus.

ZYGOPINÆ.

Mnemyne, n. g. — viduata.

TRYPETINÆ.

Trypetes politus.

PERIDINETINÆ.

Peridinetus distinctus.

--- cretaceus.

--- cinctus.

BARIDIINÆ.

Glycaria, n. g.

— tetrasticta. Anexantha, n. g.

— castanea.

Azygides, n. g. — stygius.

Madarus crassirostris.

Ambates elegans.

A. ellipticus, fuscus, supra utrinque linea flava marginali, elytrisque maculis flavis, ornatus; pedibus rufo-ferrugineis. Long. 4 lin.

Hab. Macas.

Dark brown, with a line of pure yellow scales extending from the rostrum, over the eye, and along the sides of the prothorax and elytra, nearly meeting its fellow at the apex,



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